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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/964,506	09/28/2001	Hiromitsu Seto	K-2006	2573

7590 03/28/2003  
KANESAKA AND TAKEUCHI  
1423 Powhatan Street  
Alexandria, VA 22314

EXAMINER

BOLDEN, ELIZABETH A

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 03/28/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicati n No.

09/964,506

Applicant(s)

SETO ET AL.

Examiner

Elizabeth A. Bolden

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☒ Claim(s) 1-7, 9, and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-7, 9, and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. See the following examples.

Claim 1 recites “not smaller than 65 wt.% and smaller than 74 wt.% SiO<sub>2</sub>”. The phrase is generally written “65 wt. % to less than 74 wt.% SiO<sub>2</sub>” where is clearly understood that 65 wt.% is included in the range and 74 wt.% is excluded from the range. Claim 1 further recites “not smaller than 0 wt.% and smaller than 2 wt.% MgO”, the Examiner reads this limitation as including “0 wt.% to less than 2 wt.% MgO”. The Examiner notes that one cannot have a concentration of smaller than 0 wt.%. Claim 1 also recites in line 9 “greater than 10 wt.% and not greater than 15 wt.%”, which is interpreted to read “greater than 10 to 15 wt.%”.

The claims should be rewritten to clarify whether or not the end points of the range are included in the claimed limitations.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 and 9-12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Boulos et al., U.S. Patent 5,776,845.

Boulos et al. disclose a green soda-lime-silica glass having high UV absorbing properties while having a high visible transmittance. See abstract of Boulos et al and column 4, lines 38-45. The compositional ranges and visible and UV light transmittance ranges disclosed by the reference are sufficiently specific to anticipate the compositional and visible and UV light transmittance limitations in claims 1-7 and 9. See MPEP 2131.03. Furthermore, Boulos et al. discloses Examples 11-13, 17-19, and 25, which met the limitations of claim 3. See Tables IV, V, and VI. The reference further discloses Examples 20-25, which met the limitations of claims 4 and 7. See Table VI.

Since the composition of the reference is the same as those claimed herein it follows that the glasses of Boulos et al. would inherently possess the same total solar energy transmittance, coefficient of thermal expansion, density, and Young's Modulus as recited in claims 10-12. See MPEP 2112.

Claims 1-12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Nagashima et al., U.S. Patent 6,046,122.

Nagashima et al. disclose a soda-lime-silica glass having high IR and UV absorbing properties while having a high visible transmittance. See abstract of Nagashima et al., column 3, lines 27-33, and column 4, lines 47-50. The compositional ranges and the visible, total solar, and UV light transmittance ranges disclosed by the reference are sufficiently specific to anticipate the compositional and visible and UV light transmittance limitations in claims 1-9. See MPEP 2131.03. Furthermore, Nagashima et al. discloses Examples 1-3, 5, 7, and 8, which met the limitations of claims 3, 4, 5, and 7. See Table I. The reference further discloses Examples 4 and 6, which met the limitations of claims 3, 4, and 7. See Table I.

Since the composition of the reference is the same as those claimed herein it follows that the glasses of Nagashima et al. would inherently possess the same coefficient of thermal expansion, density, and Young's Modulus as recited in claims 10-12. See MPEP 2112.

Claims 1-12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Sakaguchi et al., U.S. Patent 5,776,846.

Sakaguchi et al. disclose a soda-lime-silica glass having high IR and UV absorbing properties while having a high visible transmittance. See abstract of Sakaguchi et al. and column 3, lines 18-22 and 26-33. The compositional ranges and visible, total solar, and UV light transmittance ranges disclosed by the reference are sufficiently specific to anticipate the compositional and visible and UV light transmittance limitations in claims 1-9. See MPEP 2131.03. Furthermore, Sakaguchi et al. discloses Example 2, which met the limitations of claims 3, 4, and 7. See Table 1.

Since the composition of the reference is the same as those claimed herein it follows that the glasses of Sakaguchi et al. would inherently possess the same coefficient of thermal expansion, density, and Young's Modulus as recited in claims 10-12. See MPEP 2112.

Claims 1-12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Nagashima et al., U.S. Patent 5,858,896.

Nagashima et al. disclose a soda-lime-silica glass having high IR and UV absorbing properties while having a high visible transmittance. See abstract of Nagashima et al., column 2, lines 65-66, and column 3, lines 3-6. The compositional ranges and visible, total solar, and UV light transmittance ranges disclosed by the reference are sufficiently specific to anticipate the compositional and visible and UV light transmittance limitations in claims 1-9. See MPEP 2131.03. Furthermore, Nagashima et al. discloses Examples 1-3 and Comparative Examples 1-3, which met the limitations of claims 3-5 and 7. See Tables 1 and 2.

Since the composition of the reference is the same as those claimed herein it follows that the glasses of Nagashima et al. would inherently possess the same coefficient of thermal expansion, density, and Young's Modulus as recited in claims 10-12. See MPEP 2112.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6, 7, and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al., U.S. Patent 5,112,778 in view of Boulos et al., U.S. Patent 5,776,845.

Cheng et al. teach a soda-lime-silica glass having high IR and UV absorbing properties while having a high visible transmittance. See abstract of Cheng et al. and column 7, lines 39-47, and 54-63. Cheng et al discloses light transmittance properties for the glass composition. See column 8, lines 28-30, 33-37, and 44-46. The compositional ranges and visible and UV light transmittance ranges disclosed by the reference overlap the compositional and visible and UV light transmittance limitations in claims 3, 4, 6, and 7. Overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

Cheng et al. differs from the instant invention by not teaching the compositional ranges of the soda-lime-silica glass.

Boulos et al. teach a soda-lime-silica glass, which anticipates the compositional limitations of claims 1 and 2. See above 35 U.S.C. 102(b) rejection.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a soda-lime-silica glass of Cheng et al. as suggested by Boulos et al. because Boulos et al. teach the compositional ranges of a soda-lime-silica glass. See column 4, lines 39-44.

One of ordinary skill in the art would expect that a glass with overlapping compositional ranges would have the same coefficient of thermal expansion, density, and Young's Modulus as recited in claims 10-12.

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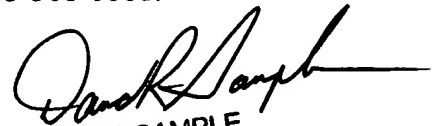
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth A. Bolden whose telephone number is 703-305-0124. The examiner can normally be reached on 8:30am to 6:00 pm with alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark L. Bell can be reached on 703-308-3823. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

EAB  
March 21, 2003

  
DAVID SAMPLE  
PRIMARY EXAMINER